# 6. Support & Retirement Phase

## Solution Life Cycle

| Phases | Vision | Definition | Construction | Deployment | Support & Retirement |
|---|---|---|---|---|---|
| **Results** | Problem Assessment | System Requirements | Detailed Design | Deployed Solution | Production Services |
| | Solution Recommendation | Preliminary Design | Accepted Solution | | |

A summary of SLC recommendations for use during the Support & Retirement Phase is contained within the following matrix.

| Phase Area | SLC Recommendations |
|---|---|
| **OBJECTIVE** | Provide operational, maintenance, and retirement support for the deployed solution |
| **ENTRY CRITERIA** (Sample provided in Appendix A) | • Solution has been successfully deployed.<br>• Project inventory list is baselined.<br>• TTS readiness review is completed.<br>• Transition sign-off is completed.<br>• SLC Security Checklist - Deployment Phase is completed and approved.<br>• System Security Plan is complete.<br>• Configuration Item Index has been baselined and migrated.<br>• CR to move application into production was successfully completed<br>• TTS Lead has been provided with ECM Tool Process and Training materials.<br>• Support personnel have obtained ECM User IDs and have completed ECM Solution training. |

| Phase Area | SLC Recommendations |
|---|---|
| **PROCESS AND OUTPUTS** | **Solution Acquisition Project Management**<br>• Closeout activities<br>• Post Implementation Review<br><br>**System Security**<br>• Security Control Review<br>• SLC Security Support & Retirement Phase Checklist<br>• Annual Self-Assessments<br>• Risk Assessments<br>• Re-certifications<br>• ED System Disposal Checklist<br><br>**Transition to Support**<br>• Completed Transition Readiness Checklist<br>• IPT Closure<br><br>**Operations and Maintenance**<br>  • Plan Operations and Maintenance Task Order Activities<br><br>**Configuration Management**<br>  • Updated Configuration Item Index<br>  • Production CRs submitted, managed and tracked in ECM Tool |
| **ROLES AND RESPONSIBILITIES** | **The following roles will participate in this phase, and are defined in the Support & Retirement Roles and Responsibilities section:**<br><br>CIO IT Services<br>CM Lead<br>Project Manager<br>System Manager<br>System Security Officer |
| **EXIT CRITERIA** | • Solution is retired.<br>• SLC Security Checklist - Support & Retirement Phase completed and approved.<br>• ED System Disposal Checklist completed and signed. |

| Phase Area | SLC Recommendations |
|---|---|
| **JOB AIDS** | • SLC Security Support & Retirement Phase Checklist<br>• NIST Self-Assessment Guide 800-26<br>• ED System Disposal Checklist (located within the Department's Risk Assessment Guide)<br>• FSA Infrastructure Change Management Impact Analysis Worksheet |

## Support & Retirement Phase Objective

The objective of the Support & Retirement Phase is to smoothly operate the new business capabilities that were created and deployed in the Deployment Phase of the SLC Process Guide. The work in this phase must also meet the formal service targets and metrics established earlier in the life cycle. In addition, it must provide mechanisms for providing feedback for improvements based on measurements of actual performance against those targets. Given these guidelines, the Support & Retirement Phase applies to all information systems and related system engineering activities associated with a deployed solution. This may include hardware, COTS products, and/or custom software, and documentation. In particular, the focus of this phase is an enterprise view of maintenance and support. In addition, the FSA QA Manager can and the QA Project Manager should assess the need for QA reviews throughout the Support & Retirement phase. Any QA plans should be documented in a QA plan.

## Support & Retirement Phase Entry Criteria

Before work in the Support & Retirement Phase can begin, the exit criteria from the Deployment Phase must be completed. To review, these are:

- Solution has been successfully deployed.
- Project inventory list is baselined.
- TTS readiness review is completed.
- Transition sign-off is completed.
- SLC Security Checklist Deployment Phase is completed and approved.
- System Security Plan is complete.
- Configuration Item Index has been baselined and migrated.
- CR to move application into production was successfully completed
- TTS Lead has been provided with ECM Tool Process and Training materials.
- Support personnel have obtained ECM User IDs and have completed ECM Solution training.

## *Support & Retirement Phase Process and Outputs*

When the Support & Retirement Phase begins, the solution has been defined, created, and deployed. Now steps need to be taken to ensure that the solution continues to be a beneficial, efficient, and utilized product. This phase of the life cycle focuses on the maintenance and support of the deployed solution. However, the support organization and personnel within the VDC perform most of the activities within this phase outside of the IPT. Therefore, the topics covered in this section are only briefly touched on.

### Solution Acquisition Project Management

Once the solution has been deployed, the IPT transitions responsibility of the solution over to the sponsor and the operating organization close-out activities are also performed. A lessons learned document may be created at this time that outlines overall issues that arose during the development and implementation of the solution, and this should be made available to other IPTs to facilitate knowledge sharing among FSA applications.

The operating organization is responsible for ensuring that the deployed solution continues to meet the performance objectives stated in the Business Performance Model. A Post Implementation Review occurs approximately six months after a system goes into production. *See the IT Investment Operating Procedures.*

### System Security

The Support & Retirement Phase continues throughout the life of the system. Once the system is deployed, several security activities and documents should be maintained. The System Security Plan should be continually reviewed and updated as the system undergoes major changes; that is, undergoes changes significant enough to alter the security posture of the system. OMB Circular A-130 Appendix III requires a review of security controls every three years or upon major system change. FSA recommends these reviews occur every year due to the rate of system change occurring at FSA. Also, the Government Information Security Reform Act requires a program and system review every year. The guidance to be used for this review can be found in the NIST Self Assessment Guide for Information Technology Systems. The self-assessment review will assist the System Security Officer and system owner determine security control priorities based on weaknesses in policy, procedures, implementation, testing, and integration.

Additionally, during the Support & Retirement Phase, the SLC Support & Retirement Phase Checklist should be signed off by the SSO. The checklist represents the completion of all security related activities for the Support & Retirement Phase. The activities include:

- Re-certified and accredited SSAA
- Documented completion of test results
- Updated Operation Procedures
- Updated Testing Results

*For more information regarding the SLC Security Support & Retirement Phase Checklist, see the System Security Process Guide.*

## Configuration Management

During the Support & Retirement Phase CRs to applications in production will become necessary. These CRs are submitted, managed and tracked in the ECM Tool.

CM Leads will take over the update and maintenance of the CM Item Index and manage the Configuration Library as new releases are implemented. CM Leads will also maintain and update the Production CM Plan.

## Transition to Support

Before the solution can be supported, the IPT needs to ensure that the necessary arrangements have been made to ensure a smooth transition to supporting the solution. The organization responsible for operating and maintaining the application (the support organization and the VDC, for most FSA applications) needs to be extensively involved in the transition to support effort. In addition, operating organization resources need to be trained in the use of the ECM Tool to submit, manage and track CRs. Please refer to the Transition Readiness Checklist for the steps that need to be followed during this transition.

## Operations and Maintenance

If a separate operations and maintenance task order needs to be created, see the Vision Phase to plan for new task order activities.

One area of consideration is the responsibility of the operating organization involves providing Help Desk services. A Help Desk is a group that is implemented to support a user community with all issues as they relate to specific applications or business functions. Help Desks can have several different constituents. Many may come from the FSA community, and others may include external customers, such as students and schools. It is at the discretion of the organization as to whether the help desk be dedicated to a single application or multiple applications. This often is dependent on the complexity of the application, number of users, and cost.

Another factor in deciding whether or not to set up a Help Desk is that they can serve as a way of gathering information from the user community on the types of issues faced in introducing the solution. Therefore, metrics from the Help Desk can be used to guide the FSA in developing systems that are better received as time goes on. A Help Desk can be used as a way of capturing information on the types of enhancements and modifications respective user communities are interested in receiving.

*Support & Retirement Phase Roles and Responsibilities*

The following matrix is provided as a guide to the roles and responsibilities of the key personnel that are in the Support & Retirement Phase of the life cycle.

| Title | Role | Responsibility |
|---|---|---|
| CIO IT SERVICES | Liaison between the VDC and the System Manager. | Identify needed VDC services. Notify the VDC of any operations related changes or changes to the solutions. |
| CM LEAD | Manage operational CM activities. | Take over the update and maintenance of the CM Item Index. Manage Configuration Library as new releases are implemented. Maintain and update Production CM Plan. |
| PROJECT MANAGER | Manage closeout activities. | Ensure that project management documentation is completed and published for the System Manager. Update Solution Acquisition Plan. |
| SYSTEM MANAGER | Own Solution. | Responsible for maintaining the system. Submit, manage and track Production CRs in ECM Tool |
| SYSTEM SECURITY OFFICER | Manage maintenance of security activities. | Manage periodic reviews of security controls, plans and documentation. Schedule annual program and security review. |

*Support & Retirement Phase Exit Criteria*

The Support & Retirement Phase will continue until the system is retired or until a new solution is envisioned and the life cycle begins again. For systems to be retired, the ED System Disposal Checklist is completed and signed.

*Support & Retirement Phase Job Aids*

The following job aids are available in the Process Guides:

- SLC Security Support & Retirement Phase Checklist
- NIST Self-Assessment Guide 800-26
- ED System Disposal Checklist (located within the Department's Risk Assessment Guide)
- FSA Infrastructure Change Management Impact Analysis Worksheet